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IP ADMINISTRATION
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EXAMINER

GILMAN, ALEXANDER

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,138

Applicant(s)

BLOOMFIELD ET AL.

Examiner

Alexander Gilman

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1, 2, 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Klein et al.

With regard to claim 1, Klein et al (US 6,186,800) disclose a method for grounding a circuit board comprising the steps of:

attaching an stud (10a) to a chassis (Abstract, lines 1-3);

attaching a ground clip (9a);

positioning stud through a mounting hole (21); and

engaging the clip with opposite sides of the mounting stud (assuming the term "opposite sides" related to lateral sides of the stud along its height) .

With regard to claim 2, Klein et al disclose that the clip attached to an upper surface of the circuit board.

With regard to claim 6, Klein et al disclose receiving the mounting stud in a biased (slanted) clip opening.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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1. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al in view of Lenhart et al.

With regard to claim 3, Klein et al disclose all of the limitations except for soldering the ground clip to the circuit board.

It would be obvious matter to solder the ground clip to the circuit board, since the soldering is a cost-effective method of attaching of components to the circuit board, including grounding clips. For example, Lenhart et al (US 6,519,817) among other methods disclose soldering.(col. 3, lines 50-53)

With regard to claim 4, Klein et al disclose the ground clip leads (15a) extending through lead holes in the circuit board.

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. in view of Petri. Klein et al do not disclose all of the limitations except for extending a mounting stud nose through the mounting hole.

Petri (US 5,281,149) discloses extending a mounting stud nose (36) through the mounting hole (39).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to extend a mounting stud nose through the mounting hole. in Klein et al , as taught by Petri , to improve positioning the stud through the mounting hole..

3. Claims 7, 9-17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. in view of Deplech et al

With regard to claim 7, Klein et al (US 6,186,800) disclose a ground clip apparatus (9a) comprising:

an generally circular (portion surrounding the cylindrical stud) upper body portion (12a) having a side opening extending from the upper body portion, a plurality of retentive leads (14a) adapted for insertion through holes in a circuit board (2a).

Klein et al do not disclose that a portion of clip body is adapted to spring open as the mounting stud nose enters the opening.

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Deplech et al (US 4,875,140) disclose a portion (10) of clip body adapted to spring open as the mounting stud nose enters the opening.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Klein et al ground clip apparatus with a portion of clip body adapted to spring open, as taught by Deplech et al, to improve fixing the mounting stud to the ground clip by elastic engagement of the clip and the mounting stud.

With regard to claims 9, 10, 12, 16, and 17, Klein et al when modified by Delpech et al, disclose biasing (16) the leads having teats (15a), said leads are substantially opposite to side opening (11a).

With regard to claims 11 and 19, Klein et al when modified by Delpech et al, disclose (Delpech et al) flared ends of the spring open body portion(10).

With regard to claims 13 and 15, Klein et al when modified by Delpech et al, inherently disclose a plurality of mounting studs, clips, and holes in the circuit board and disclose a nose (19a) of the mounting stud contacting the upper body of the grounding clip.

With regard to claim 14, Klein et al when modified by Delpech et al, disclose positioning the grounding clip with the side opening faces the mounting hole in the circuit board.

With regard to claim 20, Klein et al when modified by Delpech et al, disclose (Delpech et al) disclose the flexing ends (10) of the clip.

2. Claim 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al in view of Delpech et al and further in view of Sampson.

Klein et al when modified by Delpech et al disclose all of the limitations except for a plurality of stanchions

Sampson (US 5,108,312) discloses a plurality of stanchions (42)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Klein et al grounding clip with the plurality of stanchions, as taught by Sampson, for better engagement of the clip and the circuit board.

Response to Arguments

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Applicant's arguments filed 04/14/2003 have been fully considered but they are not persuasive.

With regard to claim 1, Applicants argue that the prior art (Klein et al) fail to disclose positioning the mounting stud through the mounting hole, since the mounting stud is located on only one side side of the board.

However, Claim 1 does not claim the mounting stud is extending through the board. On the other hand Klein et al disclose positioning the mounting stud through the mounting hole, since a screw, which is a component of the mounting stud and connected with a hole (22) of the stud through the mounting hole, will adjust position of the mounting stud (col. 5, lines 52-55).

With regard to claims 3, 4, according to Applicants request, the example of the prior art suggesting soldering a clip to PCB was included.

With regard to claims 7 and 13, 9-12, 14, 17, 19, 20, Applicants argue that the prior art (Klein et al) fail to disclose insertion of the mounting boss through a mounting hole.

However, insertion of the mounting boss through a mounting hole is not claimed in the claims under discussion.

Also, Applicants argue that in the secondary prior art (Deplech et al) clip 10 is applied not to the nose of the mounting stud, but to column already inderted.

However, the rejection under 103 is base not on full incorporation of the Deplech et al embodiment into Klein et al. Deplech et al was recited for the structural feature - "a portion of clip body adapted to spring open". That feature, when applied to Klein et al, improves fixing the mounting stud to the ground clip.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the incorporation of the well known elastic feature into the primary reference would improve fixing the mounting stud to the ground clip by elastic engagement of the clip and the mounting stud.

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Also, Applicants argue that the primary prior art (Klein et al) teaches engagement of the mounting boss 10a with the bracket 9a in a rigid manner, while Deplech et al suggest elastic attachment of two circuit boards.

However, claims do not claim a rigid or elastic connection of the mounting stud to the circuit board. The rejection under 103 was used the structural feature of the Deplech et al - "a portion of clip body adapted to spring open" - to compliment the primary reference. The fragment of Klein et al (col. 2line 59 – col. 3, line 10,) which was used by Applicants to present engagement of the mounting boss 10a with the bracket 9a in a rigid manner, actually related to engagement the bracket to the circuit board. As for Klein et al bracket, it is "formed from any material capable of deforming to make connection disclosed herein without breaking (col. 4, lines 49-52).

According to Applicants (p. 6 of the Amendment), Paquin (6,424,538) should be removed under p. 103c. However, it is necessary to confirm that the invention was made in a division of Campag not in a division of Hewlett-Packard.

Petri was utilized in the rejection if Paquin would be disqualified.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Gilman whose telephone number is (703) 305-0847. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

12/01/2003

Alex Gilman
**ALEXANDER GILMAN
PRIMARY EXAMINER**